# Refine Search

## Search Results -

| Terms | Documents |
|-------|-----------|
| L12 and L13 | 0 |

**Database:**

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US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
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EPO Abstracts Database
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Derwent World Patents Index
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**Search:**

[Refine Search]

[Recall Text] [Clear] [Interrupt]

## Search History

**DATE:** **Wednesday, September 07, 2005**    Printable Copy    Create Case

| Set Name side by side | Query | Hit Count | Set Name result set |
|-------|-------|-----------|---------------------|
| *DB=TDBD; PLUR=YES; OP=OR* | | | |
| L14 | l12 and l13 | 0 | L14 |
| L13 | underground or (under adj ground) or buried or subterranean or geologic$2 | 590 | L13 |
| L12 | radar$1 | 72 | L12 |
| *DB=USOC; PLUR=YES; OP=OR* | | | |
| L11 | l10 and identif$8 | 8 | L11 |
| L10 | l9 and imag$3 | 15 | L10 |
| L9 | l7 and l8 | 101 | L9 |
| L8 | underground or (under adj ground) or buried or subterranean or geologic$2 | 18331 | L8 |
| L7 | radar$1 | 10694 | L7 |
| *DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR* | | | |
| L6 | l5 and identif$8 | 62 | L6 |

| L5 | l4 and imag$3 | 168 | L5 |
|---|---|---|---|
| L4 | l1 and l3 | 628 | L4 |
| L3 | underground.ti,ab. or (under adj ground).ti,ab. or buried.ti,ab. or subterranean.ti,ab. or geologic$2.ti,ab. | 162025 | L3 |

*DB=PGPB; PLUR=YES; OP=OR*

| L2 | underground.ti,ab. or (under adj ground).ti,ab. or buried.ti,ab. or subterranean.ti,ab. or geologic$2.ti,ab. | 3716 | L2 |

*DB=PGPB,USPT,EPAB,JPAB,DWPI; PLUR=YES; OP=OR*

| L1 | radar$1.ti,ab. | 45325 | L1 |

END OF SEARCH HISTORY

## PALM INTRANET

## Inventor Name Search Result

Your Search was:

Last Name = WITTEN
First Name = ALAN

| Application# | Patent# | Status | Date Filed | Title | Inventor Name |
|---|---|---|---|---|---|
| 10118991 | 6700526 | 150 | 04/10/2002 | METHOD AND APPARATUS FOR IDENTIFYING BURIED OBJECTS USING GROUND PENETRATING RADAR | WITTEN, ALAN |
| 10769965 | Not Issued | 77 | 02/02/2004 | Method and apparatus for identifying buried objects using ground penetrating radar | WITTEN, ALAN |
| 10790301 | Not Issued | 41 | 03/01/2004 | Method for reconstructing complex wave attributes from limited view measurements | WITTEN, ALAN |
| 60490458 | Not Issued | 159 | 07/28/2003 | Reconstructing wave speed and attenuation from limited view measurements | WITTEN, ALAN |
| 09658188 | Not Issued | 160 | 09/08/2000 | Ground penetrating radar array and timing circuit | WITTEN, ALAN J. |
| 09866575 | Not Issued | 168 | 05/29/2001 | Ground penetrating radar array and timing circuit | WITTEN, ALAN J. |
| 10079807 | Not Issued | 161 | 02/22/2002 | Ground penetrating radar array and timing circuit | WITTEN, ALAN J. |
| 60284921 | Not Issued | 159 | 04/20/2001 | Method and apparatus for identifying buried objects using ground penetrating radar | WITTEN, ALAN J. |
| 07406396 | Not Issued | 161 | 09/12/1989 | GEOPHYSICAL IMAGING METHOD UTILIZING BACKPROPAGATION AND ZEROTH-ORDER PHASE APPROXIMATION | WITTEN, ALAN J. |
| 60127433 | Not Issued | 159 | 04/01/1999 | IMAGING DIELECTRIC AND CONDUCTIVITY FROM GROUND PENETRATING RADAR MEASUREMENTS | WITTEN, ALAN J. |
| 60152607 | Not Issued | 159 | 09/08/1999 | GROUND PENETRATING RADAR ARRAY AND TIMING | WITTEN, ALAN J. |

| | | | | CIRCUIT | |
|---|---|---|---|---|---|

## Inventor Search Completed: No Records to Display.

**Search Another: Inventor**

| Last Name | First Name | |
|---|---|---|
| WITTEN | ALAN | Search |

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Back to  PALM | ASSIGNMENT | OASIS | Home page

FORWARD/BACKWARD SEARCH. 9/7/05, 10/769,965

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
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| L1 | 2 | ("5644314").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/09/07 08:45 |
| L2 | 24 | ("4706031" \| "4937580" \| "5280284" \| "5325095" \| "5327139" \| "5446461" \| "5486833" \| "5499029" \| "5557277" \| "5592170").PN. OR ("5644314").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/09/07 08:57 |
| L3 | 2 | ("5592170").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/09/07 09:04 |
| L4 | 31 | ("4381544" \| "4430653" \| "4691204" \| "4698634" \| "4967199" \| "5057846" \| "5248975" \| "5357253" \| "5361072").PN. OR ("5592170").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/09/07 09:13 |
| L5 | 2 | ("5130711").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2005/09/07 09:13 |
| L6 | 17 | ("3967282" \| "4062010" \| "4706031" \| "4721961" \| "4746867").PN. OR ("5130711").URPN. | US-PGPUB; USPAT; USOCR | OR | OFF | 2005/09/07 09:20 |

INTERFERENCE SEARCH.        10/769,965.

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
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| L1 | 379 | ((342/22) or (342/27) or (342/59) or (342/175) or (342/176) or (342/179) or (342/189) or (342/195) or (342/196)).CCLS. | US-PGPUB | OR | OFF | 2005/09/07 10:53 |
| L2 | 32209 | underground or (under adj ground) or buried or subterranean or geologic$2 | US-PGPUB | OR | OFF | 2005/09/07 10:54 |
| L3 | 52 | l1 and l2 | US-PGPUB | OR | OFF | 2005/09/07 11:03 |

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| **From:** | PLUS |
| **Sent:** | Wednesday, September 07, 2005 12:39 PM |
| **To:** | Gregory, Bernarr |
| **Subject:** | PLUS Results for 10769965 |

Here are the PLUS search results for 10769965.

This search was prepared by the staff of the Scientific and Technical Information Center, SIRA. If you have questions or comments about this search, please reply via email to PLUS@uspto.gov.

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PLUS Search Results for S/N 10769965, Searched September 07, 2005

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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5223994).pn.
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Most Frequently Occurring Classifications of Patents Returned
From A Search of 10769965 on September 07, 2005

Original Classifications
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30   342/22
10   712/217
 7   712/23
 6   435/69.1
 4   175/26
 4   514/255.05
 4   712/215
 4   712/218
 3    73/574
 3   324/326
 3   530/350
 3   712/225
 3   712/41
 2    73/633
 2   175/61
 2   250/369
 2   257/223
 2   257/301
 2   257/347
 2   324/329
 2   324/336
 2   340/10.2
 2   361/56
 2   365/149
 2   367/99
 2   376/159
 2   435/7.24
 2   514/19
 2   514/230.5
 2   536/23.5
 2   707/104.1
 2   711/125
 2   711/151
 2   711/208
 2   712/207
 2   712/216
 2   712/244
 2   712/35
 2   712/36
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Cross-Reference Classifications
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11   342/195
10   435/325
 9   342/175
 9   342/27
 9   435/320.1
 8   712/215
 7   324/337
 7   435/252.3
 6   342/176
 6   435/69.1
 6   712/23
 5   342/179
 5   342/196
 5   342/22
 5   367/87
 5   536/23.5
 5   712/217
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5    712/218
4    175/45
4    324/326
4    340/853.4
4    342/118
4    342/459
4    360/77.07
4    361/111
4    435/7.1
4    514/326
4    530/387.9
4    536/23.1
4    711/207
4    712/214
4    712/228
3     73/661
3    175/40
3    180/168
3    257/E27.112
3    324/338
3    340/853.1
3    340/853.5
3    340/853.6
3    342/190
3    342/191
3    342/21
3    435/471
3    435/71.1
3    435/71.2
3    530/350
3    544/405
3    703/26
3    707/3
3    712/205
3    712/206
3    712/208
3    712/209
3    712/213
3    712/233
3    712/240
3    712/244
3    712/26
2     37/348
2    152/525
2    175/24
2    250/362
2    250/392
2    257/229
2    257/230
2    257/269
2    257/304
2    257/332
2    257/339
2    257/376
2    257/E21.537
2    257/E27.06
2    257/E27.077
2    257/E27.084
2    257/E27.092
2    324/220
2    324/226
2    324/239
2    324/240
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2    324/329
2    324/333
2    324/334
2    324/345
2    324/693
2    324/713
2    324/715
2    324/718
2    340/10.42
2    340/541
2    340/853.3
2    340/928
2    342/146
2    342/158
2    342/189
2    342/192
2    342/44
2    348/250
2    348/251
2    348/313
2    360/77.11
2    360/77.12
2    361/118
2    361/119
2    365/201
2    377/81
2    382/312
2    424/139.1
2    435/235.1
2    435/253.3
2    435/254.11
2    435/331
2    435/4
2    435/7.2
2    435/7.21
2    435/7.92
2    514/318
2    514/334
2    514/473
2    525/194
2    530/387.7
2    530/388.2
2    530/388.22
2    530/388.24
2    530/388.8
2    530/389.1
2    536/24.31
2    544/120
2    544/91
2    702/74
2    708/523
2    711/118
2    711/123
2    711/200
2    711/202
2    711/206
2    711/213
2    712/1
2    712/210
2    712/211
2    712/212
2    712/216
2    712/221
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2   712/223
2   712/227
2   712/229
2   712/234
2   712/237
2   712/238
2   712/36
2   712/4
2   712/41
2   712/42
2   712/7
2   712/8
2   712/9
2   715/505
2   715/529
2   715/531
2   715/539
2   715/541
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Combined Classifications
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35   342/22
15   712/217
13   712/23
12   435/69.1
12   712/215
11   342/195
10   435/325
 9   342/175
 9   342/27
 9   435/320.1
 9   712/218
 7   324/326
 7   324/337
 7   435/252.3
 7   536/23.5
 6   342/176
 6   530/350
 5   175/45
 5   342/179
 5   342/196
 5   367/87
 5   435/7.1
 5   514/255.05
 5   712/228
 5   712/244
 5   712/41
 4   175/26
 4   324/329
 4   340/853.4
 4   342/118
 4   342/459
 4   360/77.07
 4   361/111
 4   514/326
 4   530/387.9
 4   536/23.1
 4   703/26
 4   711/207
 4   712/209
 4   712/214
 4   712/216
 4   712/225
 4   712/36
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3    73/574
3    73/661
3   152/525
3   175/40
3   180/168
3   257/301
3   257/E27.112
3   324/220
3   324/338
3   324/713
3   340/853.1
3   340/853.5
3   340/853.6
3   342/190
3   342/191
3   342/21
3   360/77.12
3   361/56
3   365/149
3   367/99
3   435/4
3   435/471
3   435/7.2
3   435/7.24
3   435/71.1
3   435/71.2
3   525/194
3   544/405
3   707/3
3   711/200
3   711/202
3   711/206
3   712/205
3   712/206
3   712/208
3   712/213
3   712/221
3   712/223
3   712/227
3   712/233
3   712/234
3   712/240
3   712/26
3   712/35
2    37/348
2    73/633
2   172/5
2   175/24
2   175/61
2   235/380
2   250/362
2   250/369
2   250/392
2   257/223
2   257/229
2   257/230
2   257/269
2   257/304
2   257/332
2   257/339
2   257/347
2   257/376
2   257/E21.537
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2    257/E27.06
2    257/E27.077
2    257/E27.084
2    257/E27.092
2    324/226
2    324/239
2    324/240
2    324/333
2    324/334
2    324/336
2    324/345
2    324/357
2    324/693
2    324/715
2    324/718
2    326/40
2    340/10.2
2    340/10.42
2    340/541
2    340/853.3
2    340/928
2    342/146
2    342/158
2    342/189
2    342/192
2    342/357.06
2    342/44
2    348/250
2    348/251
2    348/313
2    360/77.01
2    360/77.11
2    361/118
2    361/119
2    361/42
2    365/201
2    376/159
2    377/81
2    382/312
2    424/139.1
2    424/143.1
2    435/235.1
2    435/253.3
2    435/254.11
2    435/331
2    435/7.21
2    435/7.92
2    514/19
2    514/230.5
2    514/318
2    514/334
2    514/473
2    525/209
2    525/240
2    530/324
2    530/387.7
2    530/388.2
2    530/388.22
2    530/388.24
2    530/388.8
2    530/389.1
2    536/24.31
2    544/120
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2   544/91
2   702/6
2   702/74
2   703/27
2   707/104.1
2   707/203
2   708/523
2   711/118
2   711/123
2   711/125
2   711/151
2   711/154
2   711/204
2   711/208
2   711/213
2   711/3
2   712/1
2   712/207
2   712/210
2   712/211
2   712/212
2   712/219
2   712/229
2   712/237
2   712/238
2   712/24
2   712/245
2   712/4
2   712/42
2   712/43
2   712/7
2   712/8
2   712/9
2   715/505
2   715/529
2   715/531
2   715/539
2   715/541
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Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10769965 on September 07, 2005

35  342/22        (30 OR, 5 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                          AND DEVICES
         342/22          TRANSMISSION THROUGH MEDIA OTHER THAN AIR OR
                          FREE SPACE

15  712/217       (10 OR, 5 XR)
         Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
         712/216         DYNAMIC INSTRUCTION DEPENDENCY CHECKING,
                          MONITORING OR CONFLICT RESOLUTION
         712/217         .Scoreboarding, reservation station, or
                          aliasing

13  712/23        (7 OR, 6 XR)
         Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
         712/1           PROCESSING ARCHITECTURE
         712/23          .Superscalar

12  435/69.1     (6 OR, 6 XR)
         Class   435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

         435/41          MICRO-ORGANISM, TISSUE CELL CULTURE OR ENZYME
                          USING PROCESS TO SYNTHESIZE A DESIRED CHEMICAL COMPOUND
OR
                          COMPOSITION
         435/69.1        .Recombinant DNA technique included in method
                          of making a protein or polypeptide

12  712/215       (4 OR, 8 XR)
         Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
         712/214         INSTRUCTION ISSUING
         712/215         .Simultaneous issuance of multiple instructions

11  342/195       (0 OR, 11 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                          AND DEVICES
         342/175         WITH PARTICULAR CIRCUIT
         342/195         .Digital processing

10  435/325       (0 OR, 10 XR)
         Class   435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

         435/325         ANIMAL CELL, PER SE (E.G., CELL LINES, ETC.);
                          COMPOSITION THEREOF; PROCESS OF PROPAGATING, MAINTAINING
OR
                          PRESERVING AN ANIMAL CELL OR COMPOSITION THEREOF; PROCESS
                          OF ISOLATING OR SEPARATING AN ANIMAL CELL OR COMPOSITION
                          THEREOF; PROCESS OF PREPARING A COMPOSITION CONTAINING AN
                          ANIMAL CELL; CULTURE MEDIA THEREFORE

 9  342/175       (0 OR, 9 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS

                                    AND DEVICES
          342/175          WITH PARTICULAR CIRCUIT

9   342/27          (0 OR, 9 XR)
          Class    342 :   COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                              AND DEVICES
          342/27           PRESENCE DETECTION ONLY

9   435/320.1       (0 OR, 9 XR)
          Class    435 :   CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

          435/320.1        VECTOR, PER SE (E.G., PLASMID, HYBRID PLASMID,
                              COSMID, VIRAL VECTOR, BACTERIOPHAGE VECTOR, ETC.)
                              BACTERIOPHAGE VECTOR, ETC.)

9   712/218         (4 OR, 5 XR)
          Class    712 :   ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                              SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                              PROCESSING
          712/216          DYNAMIC INSTRUCTION DEPENDENCY CHECKING,
                              MONITORING OR CONFLICT RESOLUTION
          712/218          .Commitment control or register bypass

7   324/326         (3 OR, 4 XR)
          Class    324 :   ELECTRICITY:  MEASURING AND TESTING
          324/323          OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
          324/326          .For small object detection or location

7   324/337         (0 OR, 7 XR)
          Class    324 :   ELECTRICITY:  MEASURING AND TESTING
          324/323          OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
          324/332          .With radiant energy or nonconductive-type
                              transmitter
          324/334          ..With separate pickup
          324/337          ...To detect return wave signals

7   435/252.3       (0 OR, 7 XR)
          Class    435 :   CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

          435/243          MICRO-ORGANISM, PER SE (E.G., PROTOZOA, ETC.);
                              COMPOSITIONS THEREOF; PROCES OF PROPAGATING,
MAINTAINING OR
                              PRESERVING MICRO-ORGANISMS OR COMPOSITIONS THEREOF;
PROCESS
                              OF PREPARING OR ISOLATING A COMPOSITION CONTAINING A
                              MICRO-ORGANISM; CULTURE MEDIA THEREFOR
          435/252.1        .Bacteria or actinomycetales; media therefor
          435/252.3        ..Transformants (e.g., recombinant DNA or
                              vector or foreign or exogenous gene containing, fused
                              bacteria, etc.)

7   536/23.5        (2 OR, 5 XR)
          Class    536 :   ORGANIC COMPOUNDS -- PART OF THE CLASS
                              532-570 SERIES
          536/1.11         .Carbohydrates or derivatives
          536/18.7         ..Nitrogen containing
          536/22.1         ...N-glycosides, polymers thereof, metal
                              derivatives (e.g., nucleic acids, oligonucleotides,
etc.)

          536/23.1         ....DNA or RNA fragments or modified forms
                              thereof (e.g., genes, etc.)
          536/23.5         .....Encodes an animal polypeptide

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6  342/176      (0 OR, 6 XR)
        Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
        342/175         WITH PARTICULAR CIRCUIT
        342/176         .Display

6  530/350      (3 OR, 3 XR)
        Class   530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                            PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                            THEREOF
        530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                            RESIDUES

5  175/45       (1 OR, 4 XR)
        Class   175 :  BORING OR PENETRATING THE EARTH
        175/40          WITH SIGNALING, INDICATING, TESTING OR
                            MEASURING
        175/45          .Tool position direction or inclination
                            measuring or indicating within the bore

5  342/179      (0 OR, 5 XR)
        Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
        342/175         WITH PARTICULAR CIRCUIT
        342/176         .Display
        342/179         ..Image production

5  342/196      (0 OR, 5 XR)
        Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
        342/175         WITH PARTICULAR CIRCUIT
        342/195         .Digital processing
        342/196         ..Fast fourier transform (FFT)

5  367/87       (0 OR, 5 XR)
        Class   367 :  COMMUNICATIONS, ELECTRICAL: ACOUSTIC WAVE
                            SYSTEMS AND DEVICES
        367/87          ECHO SYSTEMS

5  435/7.1      (1 OR, 4 XR)
        Class   435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4           MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                            OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP THEREFORE;

                            PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP
        435/7.1         .Involving antigen-antibody binding, specific
                            binding protein assay or specific ligand-receptor binding
                            assay

5  514/255.05   (4 OR, 1 XR)
        Class   514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                            COMPOSITIONS
        514/1           DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                            (DOAI)
        514/183         .Heterocyclic carbon compounds containing a
                            hetero ring having chalcogen (i.e., O,S,Se or Te) or
                            nitrogen as the only ring hetero atoms DOAI
        514/247         ..Hetero ring is six-membered consisting of two
                            nitrogens and four carbon atoms (e.g., pyridazines,
etc.)
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        514/252.1    ...1,4 diazines
        514/255.05   ....Additional hetero ring attached directly or
                         indirectly to the 1,4-diazine ring by nonionic bonding

5  712/228       (1 OR, 4 XR)
        Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                         PROCESSING
        712/220          PROCESSING CONTROL
        712/228          .Context preserving (e.g., context swapping,
                             checkpointing, register windowing

5  712/244       (2 OR, 3 XR)
        Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                         PROCESSING
        712/220          PROCESSING CONTROL
        712/233          .Branching (e.g., delayed branch, loop control,
                             branch predict, interrupt)
        712/244          ..Exeception processing (e.g., interrupts and
                             traps)

5  712/41        (3 OR, 2 XR)
        Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                         PROCESSING
        712/1            PROCESSING ARCHITECTURE
        712/32           .Microprocessor or multichip or multimodule
                             processor having sequential program control
        712/41           ..RISC

4  175/26        (4 OR, 0 XR)
        Class    175 :  BORING OR PENETRATING THE EARTH
        175/24           AUTOMATIC CONTROL
        175/26           .Of boring means including a below-ground drive
                             prime mover

4  324/329       (2 OR, 2 XR)
        Class    324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323          OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/326          .For small object detection or location
        324/329          ..Using movable transmitter and receiver

4  340/853.4     (0 OR, 4 XR)
        Class    340 :  COMMUNICATIONS:  ELECTRICAL
        340/853.1        WELLBORE TELEMETERING OR CONTROL (E.G.,
                             SUBSURFACE TOOL GUIDANCE, DATA TRANSFER, ETC.)
        340/853.3        .Selective control of subsurface equipment
        340/853.4        ..In horizontal or inclined drilling or passage

4  342/118       (0 OR, 4 XR)
        Class    342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                         AND DEVICES
        342/118          DETERMINING DISTANCE

4  342/459       (0 OR, 4 XR)
        Class    342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                         AND DEVICES
        342/350          DIRECTIVE
        342/450          .Position indicating (e.g., triangulation)
        342/459          ..Underground object location
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4  360/77.07      (0 OR, 4 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                          RETRIEVAL
        360/69            AUTOMATIC CONTROL OF A RECORDER MECHANISM
        360/75            .Controlling the head
        360/77.01         ..Track centering
        360/77.02         ...Rotary carrier
        360/77.07         ....By tracking signal recorded on or
                              immediately beneath surface

4  361/111         (0 OR, 4 XR)
        Class   361 :  ELECTRICITY:  ELECTRICAL SYSTEMS AND DEVICES

        361/1             SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
        361/111           .Transient responsive

4  514/326         (0 OR, 4 XR)
        Class   514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                          COMPOSITIONS
        514/1             DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                              (DOAI)
        514/183           .Heterocyclic carbon compounds containing a
                              hetero ring having chalcogen (i.e., O,S,Se or Te) or
                              nitrogen as the only ring hetero atoms DOAI
        514/277           ..Hetero ring is six-membered consisting of one
                              nitrogen and five carbon atoms
        514/315           ...Piperidines
        514/317           ....Additional ring containing
        514/326           .....The additional ring is a hetero ring

4  530/387.9      (0 OR, 4 XR)
        Class   530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                          PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                          THEREOF
        530/350           PROTEINS, I.E., MORE THAN 100 AMINO ACID
                              RESIDUES
        530/380           .Blood proteins or globulins, e.g.,
                              proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                              etc.
        530/386           ..Globulins
        530/387.1         ...Immunoglobulin, antibody, or fragment
                              thereof, other than immunoglobulin antibody, or fragment
                              thereof that is conjugated or absorbed
        530/387.9         ....Binds specifically-identified amino acid
                              sequence

4  536/23.1       (0 OR, 4 XR)
        Class   536 :  ORGANIC COMPOUNDS -- PART OF THE CLASS
                          532-570 SERIES
        536/1.11          .Carbohydrates or derivatives
        536/18.7          ..Nitrogen containing
        536/22.1          ...N-glycosides, polymers thereof, metal
                              derivatives (e.g., nucleic acids, oligonucleotides,
etc.)

        536/23.1          ....DNA or RNA fragments or modified forms
                              thereof (e.g., genes, etc.)

4  703/26         (1 OR, 3 XR)
        Class   703 :  DATA PROCESSING:  STRUCTURAL DESIGN,
                          MODELING, SIMULATION, AND EMULATION
        703/23            EMULATION
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        703/26          .Of instruction

4  711/207        (O OR, 4 XR)
       Class    711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS: MEMORY
       711/200          ADDRESS FORMATION
       711/202          .Address mapping (e.g., conversion,
                          translation)
       711/203          ..Virtual addressing
       711/206          ...Translation tables (e.g., segment and page
                          table or map)
       711/207          ....Directory tables (e.g., DLAT, TLB)

4  712/209        (1 OR, 3 XR)
       Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
       712/208          INSTRUCTION DECODING (E.G., BY
                          MICROINSTRUCTION, START ADDRESS GENERATOR, HARDWIRED)
       712/209          .Decoding instruction to accommodate plural
                          instruction interpretations (e.g., different dialects,
                          languages, emulation, etc.)

4  712/214        (O OR, 4 XR)
       Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
       712/214          INSTRUCTION ISSUING

4  712/216        (2 OR, 2 XR)
       Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
       712/216          DYNAMIC INSTRUCTION DEPENDENCY CHECKING,
                          MONITORING OR CONFLICT RESOLUTION

4  712/225        (3 OR, 1 XR)
       Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
       712/220          PROCESSING CONTROL
       712/225          .Processing control for data transfer

4  712/36         (2 OR, 2 XR)
       Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                          SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                          PROCESSING
       712/1            PROCESSING ARCHITECTURE
       712/32           .Microprocessor or multichip or multimodule
                          processor having sequential program control
       712/36           ..Application specific

3  73/574         (3 OR, 0 XR)
       Class    073 :  MEASURING AND TESTING
       73/570           VIBRATION
       73/574           .Mechanical impedance

3  73/661         (0 OR, 3 XR)
       Class    073 :  MEASURING AND TESTING
       73/570           VIBRATION
       73/649           .Sensing apparatus
       73/658           ..With electrically controlled indicator
       73/661           ...Having a probe
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3  152/525      (1 OR, 2 XR)
      Class  152 :  RESILIENT TIRES AND WHEELS
      152/209.26    ....Having circumferential  groove width at
                        least per cent of tread width
      152/450       .Pneumatic tire or inner tube
      152/525       ..Characterized by chemical composition or
                        physical properties of external sidewall materials

3  175/40       (0 OR, 3 XR)
      Class  175 :  BORING OR PENETRATING THE EARTH
      175/40           WITH SIGNALING, INDICATING, TESTING OR
                        MEASURING

3  180/168      (0 OR, 3 XR)
      Class  180 :  MOTOR VEHICLES
      180/167          WITH MEANS FOR CONTROLLING OPERATION RESPONSIVE
                        TO ELECTROMAGNETIC RADIATION, MAGNETIC FORCE, OR SOUND
                        WAVES RECEIVED FROM SOURCE, OR REFLECTED FROM OBJECT OR
                        SURFACE, LOCATED APART FROM VEHICLE
      180/168       .Having controlling means adapted to interact
                        with stationary means which describes course of vehicle's
                        travel

3  257/301      (2 OR, 1 XR)
      Class  257 :  ACTIVE SOLID-STATE DEVICES
      257/264       ...Enhancement mode or with high resistivity
                        channel (e.g., doping of 10 15 cm -3  or less)
      257/288       .Having insulated electrode (e.g., MOSFET, MOS
                        diode)
      257/296       ..Insulated gate capacitor or insulated gate
                        transistor combined with capacitor (e.g., dynamic memory
                        cell)
      257/301       ...Capacitor in trench

3  257/E27.112   (0 OR, 3 XR)
      Class  257 :  ACTIVE SOLID-STATE DEVICES
      257/E27.006   .Including piezo-electric, electro-resistive,
                        or magneto-resistive component (EPO)
      257/E27.009   .Including semiconductor component with at
                        least one potential barrier or surface barrier adapted
for
                        rectifying, oscillating, amplifying, or switching, or
                        Including integrated passive circuit elements (EPO)
      257/E27.111   ..Substrate comprising other than a
                        semiconductor material, e.g. insulating substrate or
                        layered substrate Including a non-semiconductor layer
(EPO)

      257/E27.112   ...Including insulator on semiconductor, e.g.
                        SOI (silicon on insulator) (EPO)

3  324/220      (1 OR, 2 XR)
      Class  324 :  ELECTRICITY:  MEASURING AND TESTING
      324/200          MAGNETIC
      324/219       .Magnetic sensor within material
      324/220       ..Sensor supported, positioned, or moved within
                        pipe

3  324/338      (0 OR, 3 XR)
      Class  324 :  ELECTRICITY:  MEASURING AND TESTING
      324/323          OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
      324/332       .With radiant energy or nonconductive-type
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                            transmitter
         324/334        ..With separate pickup
         324/338        ...Within a borehole

3   324/713        (1 OR, 2 XR)
         Class   324 :  ELECTRICITY:  MEASURING AND TESTING
         324/600        IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                            REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                            RELATIONSHIPS
         324/649        .Lumped type parameters
         324/691        ..Using resistance or conductance measurement

         324/713        ...With voltage or current signal evaluation

3   340/853.1      (0 OR, 3 XR)
         Class   340 :  COMMUNICATIONS:  ELECTRICAL
         340/853.1      WELLBORE TELEMETERING OR CONTROL (E.G.,
                          SUBSURFACE TOOL GUIDANCE, DATA TRANSFER, ETC.)

3   340/853.5      (0 OR, 3 XR)
         Class   340 :  COMMUNICATIONS:  ELECTRICAL
         340/853.1      WELLBORE TELEMETERING OR CONTROL (E.G.,
                            SUBSURFACE TOOL GUIDANCE, DATA TRANSFER, ETC.)
         340/853.3      .Selective control of subsurface equipment
         340/853.4      ..In horizontal or inclined drilling or passage

         340/853.5      ...Control of drilling apparatus using magnetic
                          field

3   340/853.6      (0 OR, 3 XR)
         Class   340 :  COMMUNICATIONS:  ELECTRICAL
         340/853.1      WELLBORE TELEMETERING OR CONTROL (E.G.,
                            SUBSURFACE TOOL GUIDANCE, DATA TRANSFER, ETC.)
         340/853.3      .Selective control of subsurface equipment
         340/853.6      ..Control of drill bit or apparatus (e.g.,
                          steering, speed, etc.)

3   342/190        (0 OR, 3 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                          AND DEVICES
         342/175        WITH PARTICULAR CIRCUIT
         342/190        .With recording

3   342/191        (0 OR, 3 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                          AND DEVICES
         342/175        WITH PARTICULAR CIRCUIT
         342/190        .With recording
         342/191        ..Mapping

3   342/21         (0 OR, 3 XR)
         Class   342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                          AND DEVICES
         342/21         BASE BAND SYSTEM

3   360/77.12      (1 OR, 2 XR)
         Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                          RETRIEVAL
         360/69         AUTOMATIC CONTROL OF A RECORDER MECHANISM
         360/75         .Controlling the head
         360/77.01      ..Track centering
         360/77.12      ...Elongated web carrier (i.e., tape)
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3  361/56      (2 OR, 1 XR)
        Class  361 :  ELECTRICITY:  ELECTRICAL SYSTEMS AND DEVICES

        361/1          SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
        361/54         .Load shunting by fault responsive means (e.g.,
                           crowbar circuit)
        361/56         ..Voltage responsive

3  365/149     (2 OR, 1 XR)
        Class  365 :  STATIC INFORMATION STORAGE AND RETRIEVAL
        365/129        SYSTEMS USING PARTICULAR ELEMENT
        365/149        .Capacitors

3  367/99      (2 OR, 1 XR)
        Class  367 :  COMMUNICATIONS, ELECTRICAL: ACOUSTIC WAVE
                           SYSTEMS AND DEVICES
        367/87         ECHO SYSTEMS
        367/99         .Distance or direction finding

3  435/4       (1 OR, 2 XR)
        Class  435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4          MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                           OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP THEREFORE;
                           PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP

3  435/471     (0 OR, 3 XR)
        Class  435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/455        .Introduction of a polynucleotide molecule into
                           or rearrangement  of nucleic acid within an animal cell
        435/471        .Introduction of a polynucleotide molecule into
                           or rearrangement of nucleic acid within a microorganism
                           (e.g., bacteria, protozoa, bacteriophage, etc.)

3  435/7.2     (1 OR, 2 XR)
        Class  435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4          MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                           OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP
THEREFORE;
                           PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP
        435/7.1        .Involving antigen-antibody binding, specific
                           binding protein assay or specific ligand-receptor
binding
                           assay
        435/7.2        ..Involving a micro-organism or cell membrane
                           bound antigen or cell membrane bound receptor or cell
                           membrane bound antibody or microbial lysate

3  435/7.24    (2 OR, 1 XR)
        Class  435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4          MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                           OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP
THEREFORE;
                           PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP
        435/7.1        .Involving antigen-antibody binding, specific
                           binding protein assay or specific ligand-receptor
binding
                           assay
        435/7.2        ..Involving a micro-organism or cell membrane
                           bound antigen or cell membrane bound receptor or cell
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                    membrane bound antibody or microbial lysate
          435/7.21       ...Animal cell
          435/7.24       ....Leukocyte (e.g., lymphocyte, granulocyte,
                            monocyte, etc.)

   3  435/71.1      (0 OR, 3 XR)
          Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

          435/41         MICRO-ORGANISM, TISSUE CELL CULTURE OR ENZYME
                            USING PROCESS TO SYNTHESIZE A DESIRED CHEMICAL COMPOUND
OR
                            COMPOSITION
          435/71.1       .Using a micro-organism to make a protein or
                            polypeptide

   3  435/71.2      (0 OR, 3 XR)
          Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

          435/41         MICRO-ORGANISM, TISSUE CELL CULTURE OR ENZYME
                            USING PROCESS TO SYNTHESIZE A DESIRED CHEMICAL COMPOUND
OR
                            COMPOSITION
          435/71.1       .Using a micro-organism to make a protein or
                            polypeptide
          435/71.2       ..Procaryotic micro-organism

   3  525/194       (1 OR, 2 XR)
          Class    525 :  SYNTHETIC RESINS OR NATURAL RUBBERS -- PART
                            OF THE CLASS 520 SERIES
          525/50         .MIXING OF TWO OR MORE SOLID POLYMERS; MIXING
                            OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING OF
SICP
                            WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WITH
A
                            CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES OF
                            FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY
OF THE
                            ABOVE OPERATIONS
          525/55         ..At least one solid polymer derived from
                            ethylenic reactants only
          525/191        ...Polymer mixture of two or more solid
                            polymers derived from ethylenically unsaturated
reactants
                            only; or mixtures of said polymer mixture with a
chemical
                            treating agent; or products or processes of preparing
any
                            of the above mixtures
          525/192        ....Treating polymer or polymer mixture with a
                            chemical treating agent other than solid polymer
          525/194        .....Agent is an organic material

   3  544/405       (0 OR, 3 XR)
          Class    544 :  ORGANIC COMPOUNDS -- PART OF THE CLASS
                            532-570 SERIES
          544/1          ..Hetero ring is six-membered having two or
                            more ring hetero atoms of which at least one is
nitrogen
                            (e.g., selenazines, etc.)
          544/224        ...The six-membered hetero ring consists of two
                            nitrogens and four carbons (e.g., 1,2-diazines, etc.)
          544/336        ....1,4-diazines
          544/405        .....Additional hetero ring which is

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3  707/3        (0 OR, 3 XR)
      Class    707 :  DATA PROCESSING:  DATABASE AND FILE
                       MANAGEMENT OR DATA STRUCTURES
      707/1            DATABASE OR FILE ACCESSING
      707/3            .Query processing (i.e., searching)

3  711/200      (1 OR, 2 XR)
      Class    711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS: MEMORY
      711/200          ADDRESS FORMATION

3  711/202      (1 OR, 2 XR)
      Class    711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS: MEMORY
      711/200          ADDRESS FORMATION
      711/202          .Address mapping (e.g., conversion,
                        translation)

3  711/206      (1 OR, 2 XR)
      Class    711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS: MEMORY
      711/200          ADDRESS FORMATION
      711/202          .Address mapping (e.g., conversion,
                        translation)
      711/203          ..Virtual addressing
      711/206          ...Translation tables (e.g., segment and page
                        table or map)

3  712/205      (0 OR, 3 XR)
      Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                       PROCESSING
      712/205          INSTRUCTION FETCHING

3  712/206      (0 OR, 3 XR)
      Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                       PROCESSING
      712/205          INSTRUCTION FETCHING
      712/206          .Of multiple instructions simultaneously

3  712/208      (0 OR, 3 XR)
      Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                       PROCESSING
      712/208          INSTRUCTION DECODING (E.G., BY
                        MICROINSTRUCTION, START ADDRESS GENERATOR, HARDWIRED)

3  712/213      (0 OR, 3 XR)
      Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                       PROCESSING
      712/209          .Decoding instruction to accommodate plural
                        instruction interpretations (e.g., different dialects,
                        languages, emulation, etc.)
      712/213          .Predecoding of instruction component

3  712/221      (1 OR, 2 XR)
      Class    712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                       SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                       PROCESSING
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        712/220     PROCESSING CONTROL
        712/221     .Arithmetic operation instruction processing

3  712/223      (1 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/220     PROCESSING CONTROL
        712/223     .Logic operation instruction processing

3  712/227      (1 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/220     PROCESSING CONTROL
        712/227     .Specialized instruction processing in support
                        of testing, debugging, emulation

3  712/233      (0 OR, 3 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/220     PROCESSING CONTROL
        712/233     .Branching (e.g., delayed branch, loop control,
                        branch predict, interrupt)

3  712/234      (1 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/220     PROCESSING CONTROL
        712/233     .Branching (e.g., delayed branch, loop control,
                        branch predict, interrupt)
        712/234     ..Conditional branching

3  712/240      (0 OR, 3 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/220     PROCESSING CONTROL
        712/233     .Branching (e.g., delayed branch, loop control,
                        branch predict, interrupt)
        712/234     ..Conditional branching
        712/239     ...Branch prediction
        712/240     ....History table

3  712/26       (0 OR, 3 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/1       PROCESSING ARCHITECTURE
        712/25      .Data driven or demand driven processor
        712/26      ..Detection/pairing based on destination, ID
                        tag, or data

3  712/35       (2 OR, 1 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
        712/1       PROCESSING ARCHITECTURE
        712/32      .Microprocessor or multichip or multimodule
                        processor having sequential program control
        712/34      ..Including coprocessor
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        712/35        ...Digital Signal processor

2   37/348        (0 OR, 2 XR)
        Class   037 :  EXCAVATING
        37/347        DITCHER
        37/348        .Condition responsive

2   73/633        (2 OR, 0 XR)
        Class   073 :  MEASURING AND TESTING
        73/570        VIBRATION
        73/584        .By mechanical waves
        73/596        ..Beamed
        73/632        ...Sonic wave transmitter or receiver
                          transducer
        73/633        ....Having transducer scanning means

2   172/5         (1 OR, 1 XR)
        Class   172 :  EARTH WORKING
        172/2         AUTOMATIC POWER CONTROL
        172/5         .Obstruction sensing type (includes plant
                          sensing)

2   175/24        (0 OR, 2 XR)
        Class   175 :  BORING OR PENETRATING THE EARTH
        175/24        AUTOMATIC CONTROL

2   175/61        (2 OR, 0 XR)
        Class   175 :  BORING OR PENETRATING THE EARTH
        175/57        PROCESSES
        175/61        .Boring curved or redirected bores

2   235/380       (1 OR, 1 XR)
        Class   235 :  REGISTERS
        235/375       SYSTEMS CONTROLLED BY DATA BEARING RECORDS
        235/380       .Credit or identification card systems

2   250/362       (0 OR, 2 XR)
        Class   250 :  RADIANT ENERGY
        250/336.1     INVISIBLE RADIANT ENERGY RESPONSIVE ELECTRIC
                          SIGNALLING
        250/361R      .With or including a luminophor
        250/362       ..Methods

2   250/369       (2 OR, 0 XR)
        Class   250 :  RADIANT ENERGY
        250/336.1     INVISIBLE RADIANT ENERGY RESPONSIVE ELECTRIC
                          SIGNALLING
        250/361R      .With or including a luminophor
        250/369       ..With output system

2   250/392       (0 OR, 2 XR)
        Class   250 :  RADIANT ENERGY
        250/336.1     INVISIBLE RADIANT ENERGY RESPONSIVE ELECTRIC
                          SIGNALLING
        250/390.01    .Neutron responsive means
        250/392       ..With indicating or recording means

2   257/223       (2 OR, 0 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/213       FIELD EFFECT DEVICE
        257/215       .Charge transfer device
        257/216       ..Majority signal carrier (e.g., buried or bulk
                          channel, or peristaltic)
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        257/222         ...Responsive to non-electrical external signal
                           (e.g., imager)
        257/223         ....Having structure to improve output signal
                           (e.g., antiblooming drain)

  2  257/229      (0 OR, 2 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/213         FIELD EFFECT DEVICE
        257/215         .Charge transfer device
        257/225         ..Non-electrical input responsive (e.g., light
                           responsive imager, input programmed by size of storage
                           sites for use as a read-only memory, etc.)
        257/229         ...Having structure to improve output signal
                           (e.g., exposure control structure)

  2  257/230      (0 OR, 2 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/213         FIELD EFFECT DEVICE
        257/215         .Charge transfer device
        257/225         ..Non-electrical input responsive (e.g., light
                           responsive imager, input programmed by size of storage
                           sites for use as a read-only memory, etc.)
        257/229         ...Having structure to improve output signal
                           (e.g., exposure control structure)
        257/230         ....With blooming suppression structure

  2  257/269      (0 OR, 2 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/213         FIELD EFFECT DEVICE
        257/256         .Junction field effect transistor (unipolar
                           transistor)
        257/268         ..Enhancement mode
        257/269         ...With means to adjust barrier height (e.g.,
                           doping profile)

  2  257/304      (0 OR, 2 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/264         ...Enhancement mode or with high resistivity
                           channel (e.g., doping of 10 15 cm -3  or less)
        257/288         .Having insulated electrode (e.g., MOSFET, MOS
                           diode)
        257/296         ..Insulated gate capacitor or insulated gate
                           transistor combined with capacitor (e.g., dynamic
memory
                           cell)
        257/301         ...Capacitor in trench
        257/304         ....Storage node isolated by dielectric from
                           semiconductor substrate

  2  257/332      (0 OR, 2 XR)
        Class   257 :  ACTIVE SOLID-STATE DEVICES
        257/264         ...Enhancement mode or with high resistivity
                           channel (e.g., doping of 10 15 cm -3  or less)
        257/288         .Having insulated electrode (e.g., MOSFET, MOS
                           diode)
        257/327         ..Short channel insulated gate field effect
                           transistor
        257/329         ...Gate controls vertical charge flow portion
                           of channel (e.g., VMOS device)
        257/330         ....Gate electrode in groove
        257/332         .....Gate electrode self-aligned with groove

  2  257/339      (0 OR, 2 XR)
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          Class   257 :  ACTIVE SOLID-STATE DEVICES
          257/264        ...Enhancement mode or with high resistivity
                              channel (e.g., doping of 10 15 cm -3  or less)
          257/288        .Having insulated electrode (e.g., MOSFET, MOS
                              diode)
          257/327        ..Short channel insulated gate field effect
                              transistor
          257/335        ...Active channel region has a graded dopant
                              concentration decreasing with distance from source
region
                              (e.g., double diffused device, DMOS transistor)
          257/339        ....With means to increase breakdown voltage


  2  257/347        (2 OR, 0 XR)
          Class   257 :  ACTIVE SOLID-STATE DEVICES
          257/264        ...Enhancement mode or with high resistivity
                              channel (e.g., doping of 10 15 cm -3  or less)
          257/288        .Having insulated electrode (e.g., MOSFET, MOS
                              diode)
          257/347        ..Single crystal semiconductor layer on
                              insulating substrate (SOI)


  2  257/376        (0 OR, 2 XR)
          Class   257 :  ACTIVE SOLID-STATE DEVICES
          257/264        ...Enhancement mode or with high resistivity
                              channel (e.g., doping of 10 15 cm -3  or less)
          257/288        .Having insulated electrode (e.g., MOSFET, MOS
                              diode)
          257/368        ..Insulated gate field effect transistor in
                              integrated circuit
          257/369        ...Complementary insulated gate field effect
                              transistors
          257/373        ....With pn junction to collect injected
                              minority carriers to prevent parasitic bipolar
transistor
                              action
          257/376        .....With barrier region of reduced minority
                              carrier lifetime (e.g., heavily doped P+ region to reduce
                              electron minority carrier lifetime, or containing deep
                              level impurity or crystal damage), or with region of high
                              threshold voltage (e.g., heavily doped channel stop
region)


  2  257/E21.537   (0 OR, 2 XR)
          Class   257 :  ACTIVE SOLID-STATE DEVICES
          257/E21.531    ...For electrical  parameters, e.g.,
                              resistance, deep-levels, CV, diffusions by electrical
means
                              (EPO)
          257/E21.532    .Manufacture or treatment of  devices
                              consisting of plurality of solid-state components
formed in
                              or on common substrate or of parts thereof; manufacture
of
                              integrated circuit devices or of parts thereof (EPO)
          257/E21.536    ..Manufacture of specific parts of devices
                              (EPO)
          257/E21.537    ...Making of localized buried regions, e.g.,
                              buried collector layer, internal connection, substrate
                              contacts (EPO)

  2  257/E27.06     (0 OR, 2 XR)
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        Class    257 :  ACTIVE SOLID-STATE DEVICES
        257/E27.006   .Including piezo-electric, electro-resistive,
                         or magneto-resistive component (EPO)
        257/E27.009   .Including semiconductor component with at
                         least one potential barrier or surface barrier
adapted for
                         rectifying, oscillating, amplifying, or switching, or
                         Including integrated passive circuit elements (EPO)
        257/E27.01    ..With semiconductor substrate only (EPO)
        257/E27.046   ...Including only semiconductor components of a
                         single kind, e.g., all bipolar transistors, all diodes,
or
                         all CMOS (EPO)
        257/E27.059   ....Including field-effect component only (EPO)

        257/E27.06    .....Field-effect transistor with insulated
                         gate (EPO)

  2  257/E27.077   (0 OR, 2 XR)
        Class    257 :  ACTIVE SOLID-STATE DEVICES
        257/E27.006   .Including piezo-electric, electro-resistive,
                         or magneto-resistive component (EPO)
        257/E27.009   .Including semiconductor component with at
                         least one potential barrier or surface barrier
adapted for
                         rectifying, oscillating, amplifying, or switching,
or
                         Including integrated passive circuit elements (EPO)
        257/E27.01    ..With semiconductor substrate only (EPO)
        257/E27.07    ...Including a plurality of individual
                         components in a repetitive configuration (EPO)
        257/E27.072   ....Including bipolar component (EPO)
        257/E27.074   .....Including bipolar transistor (EPO)
        257/E27.077   ......Static bipolar memory cell structure
                         (EPO)

  2  257/E27.084   (0 OR, 2 XR)
        Class    257 :  ACTIVE SOLID-STATE DEVICES
        257/E27.006   .Including piezo-electric, electro-resistive,
                         or magneto-resistive component (EPO)
        257/E27.009   .Including semiconductor component with at
                         least one potential barrier or surface barrier
adapted for
                         rectifying, oscillating, amplifying, or switching, or
                         Including integrated passive circuit elements (EPO)
        257/E27.01    ..With semiconductor substrate only (EPO)
        257/E27.07    ...Including a plurality of individual
                         components in a repetitive configuration (EPO)
        257/E27.081   ....Including field-effect component (EPO)
        257/E27.084   .....Dynamic random access memory, DRAM,
                         structure (EPO)

  2  257/E27.092   (0 OR, 2 XR)
        Class    257 :  ACTIVE SOLID-STATE DEVICES
        257/E27.006   .Including piezo-electric, electro-resistive,
                         or magneto-resistive component (EPO)
        257/E27.009   .Including semiconductor component with at
                         least one potential barrier or surface barrier
adapted for
                         rectifying, oscillating, amplifying, or switching,
or
                         Including integrated passive circuit elements (EPO)
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        257/E27.01    ..With semiconductor substrate only (EPO)
        257/E27.07    ...Including a plurality of individual
                           components in a repetitive configuration (EPO)
        257/E27.081   ....Including field-effect component (EPO)
        257/E27.084   .....Dynamic random access memory, DRAM,
                           structure (EPO)
        257/E27.085   ......One-transistor memory cell structure,
                           i.e., each memory cell containing only one transistor
(EPO)

        257/E27.092   .......Capacitor in trench (EPO)

   2  324/226      (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200         MAGNETIC
        324/226         .Combined

   2  324/239      (0 OR, 2 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200         MAGNETIC
        324/228         .With means to create magnetic field to test
                           material
        324/239         ..Induced voltage-type sensor

   2  324/240      (0 OR, 2 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200         MAGNETIC
        324/228         .With means to create magnetic field to test
                           material
        324/239         ..Induced voltage-type sensor
        324/240         ...Material flaw testing

   2  324/333      (0 OR, 2 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323         OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/332         .With radiant energy or nonconductive-type
                           transmitter
        324/333         ..Within a borehole

   2  324/334      (0 OR, 2 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323         OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/332         .With radiant energy or nonconductive-type
                           transmitter
        324/334         ..With separate pickup

   2  324/336      (2 OR, 0 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323         OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/332         .With radiant energy or nonconductive-type
                           transmitter
        324/334         ..With separate pickup
        324/336         ...To detect transient signals

   2  324/345      (0 OR, 2 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323         OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/345         .By magnetic means

   2  324/357      (1 OR, 1 XR)
        Class  324 :  ELECTRICITY:  MEASURING AND TESTING
        324/323         OF GEOPHYSICAL SURFACE OR SUBSURFACE IN SITU
        324/347         .Using electrode arrays, circuits, structure,
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                                 or supports
        324/354           ..Coupled to artificial current source
        324/357           ...Including separate pickup of generated
                             fields or potentials

2   324/693        (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600        IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                           REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                           RELATIONSHIPS
        324/649        .Lumped type parameters
        324/691        ..Using resistance or conductance measurement

        324/693        ...With object or substance characteristic
                          determination using conductivity effects

2   324/715        (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600        IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                           REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                           RELATIONSHIPS
        324/649        .Lumped type parameters
        324/691        ..Using resistance or conductance measurement

        324/713        ...With voltage or current signal evaluation
        324/715        ....Including a particular probing technique
                          (e.g., four point probe)

2   324/718        (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600        IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                           REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                           RELATIONSHIPS
        324/649        .Lumped type parameters
        324/691        ..Using resistance or conductance measurement

        324/713        ...With voltage or current signal evaluation
        324/715        ....Including a particular probing technique
                          (e.g., four point probe)
        324/718        .....To detect a flaw or defect

2   326/40         (1 OR, 1 XR)
        Class   326 :  ELECTRONIC DIGITAL LOGIC CIRCUITRY
        326/37         MULTIFUNCTIONAL OR PROGRAMMABLE (E.G.,
                           UNIVERSAL, ETC.)
        326/39         .Array (e.g., PLA, PAL, PLD, etc.)
        326/40         ..With flip-flop or sequential device

2   340/10.2       (2 OR, 0 XR)
        Class   340 :  COMMUNICATIONS:  ELECTRICAL
        340/825        SELECTIVE
        340/10.1       .Interrogation response
        340/10.2       ..Contention avoidance

2   340/10.42      (0 OR, 2 XR)
        Class   340 :  COMMUNICATIONS:  ELECTRICAL
        340/825        SELECTIVE
        340/10.1       .Interrogation response
        340/10.4       ..Response signal detail
        340/10.42      ...Identification only

2   340/541        (0 OR, 2 XR)
        Class   340 :  COMMUNICATIONS:  ELECTRICAL
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            340/500      CONDITION RESPONSIVE INDICATING SYSTEM
            340/540      .Specific condition
            340/541      ..Intrusion detection

 2  340/853.3    (0 OR, 2 XR)
            Class  340 :  COMMUNICATIONS:  ELECTRICAL
            340/853.1    WELLBORE TELEMETERING OR CONTROL (E.G.,
                            SUBSURFACE TOOL GUIDANCE, DATA TRANSFER, ETC.)
            340/853.3    .Selective control of subsurface equipment

 2  340/928      (0 OR, 2 XR)
            Class  340 :  COMMUNICATIONS:  ELECTRICAL
            340/907      TRAFFIC CONTROL INDICATOR
            340/928      .Combined (e.g., toll systems, one-way)

 2  342/146      (0 OR, 2 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/118      DETERMINING DISTANCE
            342/146      .Combined with determining direction

 2  342/158      (0 OR, 2 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/147      DETERMINING DIRECTION
            342/158      .Scanning

 2  342/189      (0 OR, 2 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/175      WITH PARTICULAR CIRCUIT
            342/189      .For correlation

 2  342/192      (0 OR, 2 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/175      WITH PARTICULAR CIRCUIT
            342/192      .Spectrum analysis

 2  342/357.06   (1 OR, 1 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/350      DIRECTIVE
            342/352      .Including a satellite
            342/357.01   ..With position indicating
            342/357.06   ...Using Global Positioning Satellite (GPS or
                            Glonass)

 2  342/44       (0 OR, 2 XR)
            Class  342 :  COMMUNICATIONS:  DIRECTIVE RADIO WAVE SYSTEMS
                            AND DEVICES
            342/42       RADAR TRANSPONDER SYSTEM
            342/44       .Unique identity

 2  348/250      (0 OR, 2 XR)
            Class  348 :  TELEVISION
            348/207.99   CAMERA, SYSTEM AND DETAIL
            348/222.1    .Combined image signal generator and general
                            image signal processing
            348/241      ..Including noise or undesired signal reduction

            348/250      ...In charge coupled type sensor
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2  348/251       (0 OR, 2 XR)
       Class   348 :  TELEVISION
       348/207.99     CAMERA, SYSTEM AND DETAIL
       348/222.1      .Combined image signal generator and general
                        image signal processing
       348/241        ..Including noise or undesired signal reduction

       348/251        ...Shading or black spot correction

2  348/313       (0 OR, 2 XR)
       Class   348 :  TELEVISION
       348/207.99     CAMERA, SYSTEM AND DETAIL
       348/294        .Solid-state image sensor
       348/311        ..Charge-coupled architecture
       348/313        ...With bias charge injection

2  360/77.01      (1 OR, 1 XR)
       Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                        RETRIEVAL
       360/69         AUTOMATIC CONTROL OF A RECORDER MECHANISM
       360/75         .Controlling the head
       360/77.01      ..Track centering

2  360/77.11      (0 OR, 2 XR)
       Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                        RETRIEVAL
       360/69         AUTOMATIC CONTROL OF A RECORDER MECHANISM
       360/75         .Controlling the head
       360/77.01      ..Track centering
       360/77.02      ...Rotary carrier
       360/77.07      ....By tracking signal recorded on or
                        immediately beneath surface
       360/77.11      .....Continuous servo signal

2  361/118       (0 OR, 2 XR)
       Class   361 :  ELECTRICITY:  ELECTRICAL SYSTEMS AND DEVICES

       361/1          SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
       361/117        .High voltage dissipation (e.g., lightning
                        arrester)
       361/118        ..Surge prevention (e.g., choke coil)

2  361/119       (0 OR, 2 XR)
       Class   361 :  ELECTRICITY:  ELECTRICAL SYSTEMS AND DEVICES

       361/1          SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
       361/117        .High voltage dissipation (e.g., lightning
                        arrester)
       361/118        ..Surge prevention (e.g., choke coil)
       361/119        ...In communication systems

2  361/42        (1 OR, 1 XR)
       Class   361 :  ELECTRICITY:  ELECTRICAL SYSTEMS AND DEVICES

       361/1          SAFETY AND PROTECTION OF SYSTEMS AND DEVICES
       361/42         .Ground fault protection

2  365/201       (0 OR, 2 XR)
       Class   365 :  STATIC INFORMATION STORAGE AND RETRIEVAL
       365/189.01     READ/WRITE CIRCUIT
       365/201        .Testing

2  376/159       (2 OR, 0 XR)
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        Class    376 :  INDUCED NUCLEAR REACTIONS:  PROCESSES,
                           SYSTEMS, AND ELEMENTS
        376/156         NUCLEAR TRANSMUTATION (E.G., BY MEANS OF
                           PARTICLE OR WAVE ENERGY)
        376/158         .By neutron bombardment
        376/159         ..Neutron activation analysis

  2  377/81        (0 OR, 2 XR)
        Class    377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                           SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
        377/64          SHIFT REGISTER
        377/77          .Particular transfer means
        377/81          ..Logic circuit

  2  382/312       (0 OR, 2 XR)
        Class    382 :  IMAGE ANALYSIS
        382/312         IMAGE SENSING

  2  424/139.1     (0 OR, 2 XR)
        Class    424 :  DRUG, BIO-AFFECTING AND BODY TREATING
                           COMPOSITIONS
        424/130.1       IMMUNOGLOBULIN, ANTISERUM, ANTIBODY, OR
                           ANTIBODY FRAGMENT, EXCEPT CONJUGATE OR COMPLEX OF THE
SAME
                           WITH NONIMMUNOGLOBULIN MATERIAL
        424/139.1       .Binds antigen or epitope whose amino acid
                           sequence is disclosed in whole or in part (e.g., binds
                           specifically-identified amino acid sequence, etc.)

  2  424/143.1     (1 OR, 1 XR)
        Class    424 :  DRUG, BIO-AFFECTING AND BODY TREATING
                           COMPOSITIONS
        424/130.1       IMMUNOGLOBULIN, ANTISERUM, ANTIBODY, OR
                           ANTIBODY FRAGMENT, EXCEPT CONJUGATE OR COMPLEX OF THE
SAME
                           WITH NONIMMUNOGLOBULIN MATERIAL
        424/141.1       .Monoclonal antibody or fragment thereof (i.e.,
                           produced by any cloning technology)
        424/143.1       ..Binds receptor

  2  435/235.1     (0 OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/235.1       VIRUS OR BACTERIOPHAGE, EXCEPT FOR VIRAL VECTOR
                           OR BACTERIOPHAGE VECTOR; COMPOSITION THEREOF; PREPARATION
                           OR PURIFICATION THEREOF; PRODUCTION OF VIRAL SUBUNITS;
                           MEDIA FOR PROPAGATING

  2  435/253.3     (0 OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/243         MICRO-ORGANISM, PER SE (E.G., PROTOZOA, ETC.);
                           COMPOSITIONS THEREOF; PROCES OF PROPAGATING,
MAINTAINING OR
                           PRESERVING MICRO-ORGANISMS OR COMPOSITIONS THEREOF;
PROCESS
                           OF PREPARING OR ISOLATING A COMPOSITION CONTAINING A
                           MICRO-ORGANISM; CULTURE MEDIA THEREFOR
        435/252.1       .Bacteria or actinomycetales; media therefor
        435/253.3       ..Pseudomonas

  2  435/254.11    (0 OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY
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        435/243       MICRO-ORGANISM, PER SE (E.G., PROTOZOA, ETC.);
                          COMPOSITIONS THEREOF; PROCES OF PROPAGATING,
MAINTAINING OR
                      PRESERVING MICRO-ORGANISMS OR COMPOSITIONS THEREOF;
PROCESS
                      OF PREPARING OR ISOLATING A COMPOSITION CONTAINING A
                      MICRO-ORGANISM; CULTURE MEDIA THEREFOR
        435/254.1     .Fungi
        435/254.11    ..Transformants

  2  435/331      (O OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/325       ANIMAL CELL, PER SE (E.G., CELL LINES, ETC.);
                          COMPOSITION THEREOF; PROCESS OF PROPAGATING,
MAINTAINING OR
                      PRESERVING AN ANIMAL CELL OR COMPOSITION THEREOF;
PROCESS
                      OF ISOLATING OR SEPARATING AN ANIMAL CELL OR
COMPOSITION
                      THEREOF; PROCESS OF PREPARING A COMPOSITION CONTAINING
AN
                      ANIMAL CELL; CULTURE MEDIA THEREFORE
        435/326       .Animal cell, per se, expressing
                          immunoglobulin, antibody, or fragment thereof
        435/331       ..Immunoglobulin or antibody binds a
                          specifically identified amino acid sequence

  2  435/7.21     (O OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4         MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                          OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP
THEREFORE;
                          PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP
        435/7.1       .Involving antigen-antibody binding, specific
                          binding protein assay or specific ligand-receptor
binding
                          assay
        435/7.2       ..Involving a micro-organism or cell membrane
                          bound antigen or cell membrane bound receptor or cell
                          membrane bound antibody or microbial lysate
        435/7.21      ...Animal cell

  2  435/7.92     (O OR, 2 XR)
        Class    435 :  CHEMISTRY: MOLECULAR BIOLOGY AND MICROBIOLOGY

        435/4         MEASURING OR TESTING PROCESS INVOLVING ENZYMES
                          OR MICRO-ORGANISMS; COMPOSITION OR TEST STRIP
THEREFORE;
                          PROCESSES OF FORMING SUCH COMPOSITION OR TEST STRIP
        435/7.1       .Involving antigen-antibody binding, specific
                          binding protein assay or specific ligand-receptor
binding
                          assay
        435/7.9       ..Assay in which an enzyme present is a label

        435/7.92      ...Heterogeneous or solid phase assay system
                          (e.g., ELISA, etc.)

  2  514/19       (2 OR, O XR)
        Class    514 :  DRUG, BIO-AFFECTING AND BODY TREATING
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                      COMPOSITIONS
        514/1         DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                          (DOAI)
        514/2         .Peptide containing (e.g., protein, peptones,
                          fibrinogen, etc.) DOAI
        514/19        ..2 peptide repeating units in known peptide
                          chain

  2  514/230.5    (2 OR, 0 XR)
        Class    514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                          COMPOSITIONS
        514/1         DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                          (DOAI)
        514/183       .Heterocyclic carbon compounds containing a
                          hetero ring having chalcogen (i.e., O,S,Se or Te) or
                          nitrogen as the only ring hetero atoms DOAI
        514/228.8     ..Hetero ring is six-membered and includes at
                          least nitrogen and oxygen as ring hetero atoms (e.g.,
                          monocyclic 1,2- and 1,3-oxazines, etc.)
        514/229.5     ...Polycyclo ring system having the
                          six-membered hetero ring as one of the cyclos (e.g.,
                          maytansinoids, etc.)
        514/230.5     ....Bicyclo ring system having the six-membered
                          hetero ring as one of the cyclos (e.g., 1,4-benzoxazines,
                          etc.)

  2  514/318      (0 OR, 2 XR)
        Class    514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                          COMPOSITIONS
        514/1         DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                          (DOAI)
        514/183       .Heterocyclic carbon compounds containing a
                          hetero ring having chalcogen (i.e., O,S,Se or Te) or
                          nitrogen as the only ring hetero atoms DOAI
        514/277       ..Hetero ring is six-membered consisting of one
                          nitrogen and five carbon atoms
        514/315       ...Piperidines
        514/317       ....Additional ring containing
        514/318       .....The additional ring is a six-membered
                          hetero ring consisting of one nitrogen and five carbon
                          atoms

  2  514/334      (0 OR, 2 XR)
        Class    514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                          COMPOSITIONS
        514/1         DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                          (DOAI)
        514/183       .Heterocyclic carbon compounds containing a
                          hetero ring having chalcogen (i.e., O,S,Se or Te) or
                          nitrogen as the only ring hetero atoms DOAI
        514/277       ..Hetero ring is six-membered consisting of one
                          nitrogen and five carbon atoms
        514/332       ...Plural six-membered hetero rings consisting
                          of one nitrogen and five carbon atoms
        514/334       ....The six-membered hetero rings are bonded
                          directly to each other

  2  514/473      (0 OR, 2 XR)
        Class    514 :  DRUG, BIO-AFFECTING AND BODY TREATING
                          COMPOSITIONS
        514/1         DESIGNATED ORGANIC ACTIVE INGREDIENT CONTAINING
                          (DOAI)
        514/183       .Heterocyclic carbon compounds containing a
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                                hetero ring having chalcogen (i.e., O,S,Se or Te) or
                                nitrogen as the only ring hetero atoms DOAI
          514/449            ..Oxygen containing hetero ring
          514/461            ...The hetero ring is five-membered
          514/473            ....Chalcogen bonded directly to the hetero
                                ring

   2  525/209        (1 OR, 1 XR)
          Class    525 :   SYNTHETIC RESINS OR NATURAL RUBBERS -- PART
                            OF THE CLASS 520 SERIES
          525/50            .MIXING OF TWO OR MORE SOLID POLYMERS; MIXING
                                OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING OF
SICP
                                WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WITH
A
                                CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES OF
                                FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY
OF THE
                                ABOVE OPERATIONS
          525/55            ..At least one solid polymer derived from
                                ethylenic reactants only
          525/191           ...Polymer mixture of two or more solid
                                polymers derived from ethylenically unsaturated
reactants
                                only; or mixtures of said polymer mixture with a
chemical
                                treating agent; or products or processes of preparing
any
                                of the above mixtures
          525/209           ....Solid polymer derived from reactant
                                containing elements other than C, H, O, N, S, or Cl

   2  525/240        (1 OR, 1 XR)
          Class    525 :   SYNTHETIC RESINS OR NATURAL RUBBERS -- PART
                            OF THE CLASS 520 SERIES
          525/50            .MIXING OF TWO OR MORE SOLID POLYMERS; MIXING
                                OF SOLID POLYMER OR SICP WITH SICP OR SPFI; MIXING OF
SICP
                                WITH AN ETHYLENIC AGENT; MIXING OF SOLID POLYMER WITH
A
                                CHEMICAL TREATING OR ETHYLENIC AGENT; OR PROCESSES OF
                                FORMING OR REACTING; OR THE RESULTANT PRODUCT OF ANY
OF THE
                                ABOVE OPERATIONS
          525/55            ..At least one solid polymer derived from
                                ethylenic reactants only
          525/191           ...Polymer mixture of two or more solid
                                polymers derived from ethylenically unsaturated
reactants
                                only; or mixtures of said polymer mixture with a
chemical
                                treating agent; or products or processes of preparing
any
                                of the above mixtures
          525/240           ....Solid polymer derived from ethylene or
                                propylene

   2  530/324        (1 OR, 1 XR)
          Class    530 :   CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                            PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                            THEREOF
          530/300           PEPTIDES OF 3 TO 100 AMINO ACID RESIDUES
          530/324           .25 or more amino acid residues in defined
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2  530/387.7     (0 OR, 2 XR)
          Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                          PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                          THEREOF
          530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                              RESIDUES
          530/380         .Blood proteins or globulins, e.g.,
                              proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                              etc.                   ,
          530/386         ..Globulins
          530/387.1       ...Immunoglobulin, antibody, or fragment
                              thereof, other than immunoglobulin antibody, or fragment
                              thereof that is conjugated or absorbed
          530/387.7       ....Binds expression product of cancer-related
                              gene or fragment thereof (e.g., oncogene, proto-oncogene,
                              etc.)

2  530/388.2     (0 OR, 2 XR)
          Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                          PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                          THEREOF
          530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                              RESIDUES
          530/380         .Blood proteins or globulins, e.g.,
                              proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                              etc.
          530/386         ..Globulins
          530/387.1       ...Immunoglobulin, antibody, or fragment
                              thereof, other than immunoglobulin antibody, or
fragment
                              thereof that is conjugated or absorbed
          530/388.1       ....Monoclonal
          530/388.2       .....Binds microorganism or normal or mutant
                              component or product thereof (e.g., animal cell,
                              cell-surface antigen, secretory product, etc.)

2  530/388.22    (0 OR, 2 XR)
          Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                          PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                          THEREOF
          530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                              RESIDUES
          530/380         .Blood proteins or globulins, e.g.,
                              proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                              etc.
          530/386         ..Globulins
          530/387.1       ...Immunoglobulin, antibody, or fragment
                              thereof, other than immunoglobulin antibody, or
fragment
                              thereof that is conjugated or absorbed
          530/388.1       ....Monoclonal
          530/388.2       .....Binds microorganism or normal or mutant
                              component or product thereof (e.g., animal cell,
                              cell-surface antigen, secretory product, etc.)
          530/388.22      ......Binds receptor (e.g., transferrin
                              receptor, Fc receptor, dihydropyridine receptor, IL-2
                              receptor, etc.)
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2  530/388.24    (0 OR, 2 XR)
        Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                        PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                        THEREOF
        530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                             RESIDUES
        530/380         .Blood proteins or globulins, e.g.,
                             proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                             etc.
        530/386         ..Globulins
        530/387.1       ...Immunoglobulin, antibody, or fragment
                             thereof, other than immunoglobulin antibody, or
fragment
                             thereof that is conjugated or absorbed
        530/388.1       ....Monoclonal
        530/388.2       .....Binds microorganism or normal or mutant
                             component or product thereof (e.g., animal cell,
                             cell-surface antigen, secretory product, etc.)
        530/388.24      ......Binds hormone or other secreted growth
                             regulatory factor, differentiation factor, intercellular
                             mediator, or neurotransmitter (e.g., insulin, human
                             chorionic gonadotropin, intragonadal regulatory protein,
                             Mullerian inhibiting substance, inhibin, epidermal growth
                             factor, nerve growth factor, dopamine, norepinephrine,
                             etc.)

2  530/388.8     (0 OR, 2 XR)
        Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                        PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                        THEREOF
        530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                             RESIDUES
        530/380         .Blood proteins or globulins, e.g.,
                             proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                             etc.
        530/386         ..Globulins
        530/387.1       ...Immunoglobulin, antibody, or fragment
                             thereof, other than immunoglobulin antibody, or
fragment
                             thereof that is conjugated or absorbed
        530/388.1       ....Monoclonal
        530/388.2       .....Binds microorganism or normal or mutant
                             component or product thereof (e.g., animal cell,
                             cell-surface antigen, secretory product, etc.)
        530/388.8       ......Binds cancer cell or component or product
                             thereof (e.g., cell-surface antigen, etc.)

2  530/389.1     (0 OR, 2 XR)
        Class    530 :  CHEMISTRY:  NATURAL RESINS OR DERIVATIVES;
                        PEPTIDES OR PROTEINS; LIGNINS OR REACTION    PRODUCTS
                        THEREOF
        530/350         PROTEINS, I.E., MORE THAN 100 AMINO ACID
                             RESIDUES
        530/380         .Blood proteins or globulins, e.g.,
                             proteoglycans, platelet factor 4, thyroglobulin,
thyroxine,
                             etc.
        530/386         ..Globulins
        530/387.1       ...Immunoglobulin, antibody, or fragment
                             thereof, other than immunoglobulin antibody, or fragment
                             thereof that is conjugated or absorbed
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         530/389.1      ....Polyclonal antibody or immunogloblin of
                            identified binding specificity

   2  536/24.31       (0 OR, 2 XR)
            Class   536 :  ORGANIC COMPOUNDS -- PART OF THE CLASS
                            532-570 SERIES
            536/1.11       .Carbohydrates or derivatives
            536/18.7       ..Nitrogen containing
            536/22.1       ...N-glycosides, polymers thereof, metal
                              derivatives (e.g., nucleic acids, oligonucleotides,
etc.)

            536/23.1       ....DNA or RNA fragments or modified forms
                              thereof (e.g., genes, etc.)
            536/24.3       .....Probes for detection of specific
                              nucleotide sequences or primers for the synthesis of DNA
or
                           RNA
            536/24.31      .....'..Probes for detection of animal nucleotide
                              sequences

   2  544/120         (0 OR, 2 XR)
            Class   544 :  ORGANIC COMPOUNDS -- PART OF THE CLASS
                            532-570 SERIES
            544/1          ..Hetero ring is six-membered having two or
                              more ring hetero atoms of which at least one is
nitrogen
                                 (e.g., selenazines, etc.)
            544/63         ...Six-membered hetero ring consists of oxygen,
                              nitrogen and carbon (e.g., 1,2-oxazines, etc)
            544/98         ....1,4-Oxazines
            544/106        .....Morpholines (i.e., fully hydrogenated
                              1,4-oxazines
            544/111        ......Additional nitrogen containing hetero
                              ring (e.g., thiazetidine, etc.)
            544/114        .......Diazine ring
            544/120        ........1,4-Diazine ring

   2  544/91          (0 OR, 2 XR)
            Class   544 :  ORGANIC COMPOUNDS -- PART OF THE CLASS
                            532-570 SERIES
            544/1          ..Hetero ring is six-membered having two or
                              more ring hetero atoms of which at least one is
nitrogen
                                 (e.g., selenazines, etc.)
            544/63         ...Six-membered hetero ring consists of oxygen,
                              nitrogen and carbon (e.g., 1,2-oxazines, etc)
            544/88         ....1,3-Oxazines
            544/89         .....Polycyclo ring system having the oxazine
                              ring as one of the cyclos
            544/90         ......Bicyclo ring system having the oxazine
                              ring as one of the cyclos
            544/91         .......Three or more ring hetero atoms in the
                              bicyclo ring system

   2  702/6           (1 OR, 1 XR)
            Class   702 :  DATA PROCESSING: MEASURING, CALIBRATING, OR
                            TESTING
            702/1          MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT
            702/2          .Earth science
            702/6          ..Well logging or borehole study

   2  702/74          (0 OR, 2 XR)
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        Class   702 : DATA PROCESSING: MEASURING, CALIBRATING, OR
                      TESTING
        702/1         MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT
        702/57        .Electrical signal parameter measurement system

        702/66        ..Waveform analysis
        702/71        ...Waveform-to-waveform comparison
        702/74        ....Signal-in-signal determination

  2  703/27         (1 OR, 1 XR)
        Class   703 : DATA PROCESSING:  STRUCTURAL DESIGN,
                      MODELING, SIMULATION, AND EMULATION
        703/23        EMULATION
        703/27        .Compatibility emulation

  2  707/104.1      (2 OR, 0 XR)
        Class   707 : DATA PROCESSING:  DATABASE AND FILE
                      MANAGEMENT OR DATA STRUCTURES
        707/100       DATABASE SCHEMA OR DATA STRUCTURE
        707/104.1     .Application of database or data structure
                       (e.g., distributed, multimedia, image)

  2  707/203        (1 OR, 1 XR)
        Class   707 : DATA PROCESSING:  DATABASE AND FILE
                      MANAGEMENT OR DATA STRUCTURES
        707/200       FILE OR DATABASE MAINTENANCE
        707/201       .Coherency (e.g., same view to multiple users)

        707/203       ..Version management

  2  708/523        (0 OR, 2 XR)
        Class   708 : ELECTRICAL COMPUTERS:  ARITHMETIC PROCESSING
                      AND CALCULATING
        708/100       ELECTRICAL DIGITAL CALCULATING COMPUTER
        708/200       .Particular function performed
        708/490       ..Arithmetical operation
        708/523       ...Multiplication followed by addition (i.e.,
                       x*y+z)

  2  711/118        (0 OR, 2 XR)
        Class   711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                      SYSTEMS: MEMORY
        711/100       STORAGE ACCESSING AND CONTROL
        711/117       .Hierarchical memories
        711/118       ..Caching

  2  711/123        (0 OR, 2 XR)
        Class   711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                      SYSTEMS: MEMORY
        711/100       STORAGE ACCESSING AND CONTROL
        711/117       .Hierarchical memories
        711/118       ..Caching
        711/119       ...Multiple caches
        711/123       ....User data cache and instruction data cache

  2  711/125        (2 OR, 0 XR)
        Class   711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                      SYSTEMS: MEMORY
        711/100       STORAGE ACCESSING AND CONTROL
        711/117       .Hierarchical memories
        711/118       ..Caching
        711/125       ...Instruction data cache
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2 711/151       (2 OR, 0 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/100           STORAGE ACCESSING AND CONTROL
      711/147           .Shared memory area
      711/151           ..Prioritized access regulation

2 711/154       (1 OR, 1 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/100           STORAGE ACCESSING AND CONTROL
      711/154           .Control technique

2 711/204       (1 OR, 1 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/200           ADDRESS FORMATION
      711/202           .Address mapping (e.g., conversion,
                           translation)
      711/203           ..Virtual addressing
      711/204           ...Predicting, look-ahead

2 711/208       (2 OR, 0 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/200           ADDRESS FORMATION
      711/202           .Address mapping (e.g., conversion,
                           translation)
      711/203           ..Virtual addressing
      711/206           ...Translation tables (e.g., segment and page
                           table or map)
      711/208           ....Segment or page table descriptor

2 711/213       (0 OR, 2 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/200           ADDRESS FORMATION
      711/213           .Generating prefetch, look-ahead, jump, or
                           predictive address

2 711/3         (1 OR, 1 XR)
      Class   711 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS: MEMORY
      711/1             ADDRESSING COMBINED WITH SPECIFIC MEMORY
                           CONFIGURATION OR SYSTEM
      711/3             .Addressing cache memories

2 712/1         (0 OR, 2 XR)
      Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
      712/1             PROCESSING ARCHITECTURE

2 712/207       (2 OR, 0 XR)
      Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                        SYSTEMS:  PROCESSING ARCHITECTURES AND    INSTRUCTION
                        PROCESSING
      712/205           INSTRUCTION FETCHING
      712/207           .Prefetching

2 712/210       (0 OR, 2 XR)
      Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
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                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/209      .Decoding instruction to accommodate plural
                        instruction interpretations (e.g., different dialects,
                        languages, emulation, etc.)
        712/210      .Decoding instruction to accommodate variable
                        length instruction or operand

2  712/211        (0 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/209      .Decoding instruction to accommodate plural
                        instruction interpretations (e.g., different dialects,
                        languages, emulation, etc.)
        712/211      .Decoding instruction to generate an address of
                        a microroutine

2  712/212        (0 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/209      .Decoding instruction to accommodate plural
                        instruction interpretations (e.g., different dialects,
                        languages, emulation, etc.)
        712/212      .Decoding by plural parallel decoders

2  712/219        (1 OR, 1 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/216      DYNAMIC INSTRUCTION DEPENDENCY CHECKING,
                        MONITORING OR CONFLICT RESOLUTION
        712/219      .Reducing an impact of a stall or pipeline
                        bubble

2  712/229        (0 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/220      PROCESSING CONTROL
        712/229      .Mode switch or change

2  712/237        (0 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/220      PROCESSING CONTROL
        712/233      .Branching (e.g., delayed branch, loop control,
                        branch predict, interrupt)
        712/234      ..Conditional branching
        712/237      ...Prefetching a branch target (i.e., look
                        ahead)

2  712/238        (0 OR, 2 XR)
        Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                    SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                    PROCESSING
        712/220      PROCESSING CONTROL
        712/233      .Branching (e.g., delayed branch, loop control,
                        branch predict, interrupt)
        712/234      ..Conditional branching
        712/237      ...Prefetching a branch target (i.e., look
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                       ahead)
          712/238      ....Branch target buffer

2  712/24        (1 OR, 1 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/24       .Long instruction word

2  712/245       (1 OR, 1 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/220      PROCESSING CONTROL
          712/245      .Processing sequence control (i.e.,
                         microsequencing)

2  712/4         (0 OR, 2 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/2        .Vector processor
          712/4        ..Distributing of vector data to vector
                         registers

2  712/42        (0 OR, 2 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/32       .Microprocessor or multichip or multimodule
                         processor having sequential program control
          712/42       ..Operation

2  712/43        (1 OR, 1 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/32       .Microprocessor or multichip or multimodule
                         processor having sequential program control
          712/42       ..Operation
          712/43       ...Mode switching

2  712/7         (0 OR, 2 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/2        .Vector processor
          712/7        ..Vector processor operation

2  712/8         (0 OR, 2 XR)
          Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                         SYSTEMS:  PROCESSING ARCHITECTURES AND   INSTRUCTION
                         PROCESSING
          712/1        PROCESSING ARCHITECTURE
          712/2        .Vector processor
          712/7        ..Vector processor operation
          712/8        ...Sequential
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2  712/9        (0 OR, 2 XR)
       Class   712 :  ELECTRICAL COMPUTERS AND DIGITAL PROCESSING
                      SYSTEMS:   PROCESSING ARCHITECTURES AND    INSTRUCTION
                      PROCESSING
       712/1          PROCESSING ARCHITECTURE
       712/2          .Vector processor
       712/7          ..Vector processor operation
       712/9          ...Concurrent

2  715/505      (0 OR, 2 XR)
       Class   715 :  DATA PROCESSING:   PRESENTATION PROCESSING OF
                      DOCUMENT
       715/500        PRESENTATION PROCESSING OF DOCUMENT
       715/505        .Form

2  715/529      (0 OR, 2 XR)
       Class   715 :  DATA PROCESSING:   PRESENTATION PROCESSING OF
                      DOCUMENT
       715/500        PRESENTATION PROCESSING OF DOCUMENT
       715/526        .Display processing
       715/529        ..Text attribute

2  715/531      (0 OR, 2 XR)
       Class   715 :  DATA PROCESSING:   PRESENTATION PROCESSING OF
                      DOCUMENT
       715/500        PRESENTATION PROCESSING OF DOCUMENT
       715/530        .Edit, composition, or storage control
       715/531        ..Text

2  715/539      (0 OR, 2 XR)
       Class   715 :  DATA PROCESSING:   PRESENTATION PROCESSING OF
                      DOCUMENT
       715/500        PRESENTATION PROCESSING OF DOCUMENT
       715/530        .Edit, composition, or storage control
       715/539        ..Block control

2  715/541      (0 OR, 2 XR)
       Class   715 :  DATA PROCESSING:   PRESENTATION PROCESSING OF
                      DOCUMENT
       715/500        PRESENTATION PROCESSING OF DOCUMENT
       715/530        .Edit, composition, or storage control
       715/541        ..Handwritten textual input
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analysis 1
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block 1
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bresking 1
broadly 1
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buded 1
building 9
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buried 47
by 15
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canprovide 1
capable 5
carr 1
causing 4
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circuit 1
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claims 2
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comprises 12
comprising 25
computer 27
computerreadable 1
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conventional 3
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correlations 8
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corresponding 13
correspondlng 1
cost 3
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fi 1
fiber 1
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filed 2
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flnnegan 1
fm 1

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fof 1
following 1
follows 1
for 64
forbuilding 1
fordirecting 1
foregoing 1
foridentifying 2
forremediation 1
forth 1
found 3
fpr 1
frequency 1
frequently 1
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function 1
further 21
furthercomprises 1
furtlker 1
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graph 1
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grotmd 2
ground 9
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guarantee 2
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representing 1
require 1
respect 1
responding 1
response 2
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revenue 2
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round 1
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safe 1
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stret 2
stretv 1
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subsudace 1
sucb 1
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sue 4
suffers 1

suitable 2
swept 1
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tbree 1
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total 1
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uses 2
usgg 1
usin 1
using 19

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utility 12
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vehicle 2
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view 1
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wherein 13
which 8
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will 3
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wirten 1
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xexxwaqfinnsvan 1
xk 1
year 1
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ze 1
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